

**Amendments to the Claims:**

1. (previously presented) An isolated protein comprising an amino acid sequence selected from the group consisting of:

SEQ ID NO: 2 and

immunogenic fragments of SEQ ID NO: 2,

wherein said protein elicits the production of antibodies that interfere with invasion by *Babesia bovis* into erythrocytes.

2.-3. (cancelled)

4. (previously presented) A nucleic acid, wherein said nucleic acid encodes a protein according to claim 1.

5.-6. (cancelled)

7. (previously presented) A cDNA fragment comprising a nucleic acid according to claim 4.

8. (previously presented) A recombinant DNA molecule comprising

i) a nucleic acid according to claim 4, or

ii) a cDNA fragment comprising (i);

wherein said cDNA fragment or said nucleic acid is under the control of a functionally linked promoter.

9. (previously presented) A live recombinant carrier comprising

i) a nucleic acid according to claim 4,

ii) a cDNA fragment comprising a nucleic acid according to claim 4,

iii) a recombinant DNA molecule comprising a nucleic acid according to claim 4, or

iv) a recombinant DNA molecule comprising a cDNA fragment comprising a nucleic acid according to claim 4;

wherein said cDNA fragment or said nucleic acid is under the control of a functionally linked promoter.

10. (previously presented) A host cell comprising

i) a nucleic acid according to claim 4,

ii) a cDNA fragment comprising a nucleic acid according to claim 4,

iii) a recombinant DNA molecule comprising a nucleic acid according to claim 4,

iv) a recombinant DNA molecule comprising a cDNA fragment comprising a nucleic acid according to claim 4,

v) a live recombinant carrier comprising a nucleic acid according to claim 4,

vi) a live recombinant carrier comprising a cDNA fragment comprising a nucleic acid according to claim 4,

vii) a live recombinant carrier comprising a recombinant DNA molecule comprising a nucleic acid according to claim 4, or

viii) a live recombinant carrier comprising a recombinant DNA molecule comprising a cDNA fragment comprising a nucleic acid according to claim 4;

wherein said nucleic acid or said cDNA fragment are under the control of a functionally linked promoter.

11. -25. (cancelled)